



(12) **Patent Application Publication**  
**Marshall et al.**

(43) **Pub. Date:** **Jun. 11, 2020**

**C09D 5/00** (2006.01)

(52) U.S. Cl.

CPC ..... ***C03C 17/225*** (2013.01); ***H05K 5/0017***  
(2013.01); ***H05K 5/03*** (2013.01); ***G02B 1/113***  
(2013.01); ***G02B 1/14*** (2015.01); ***C03C***  
***2218/154*** (2013.01); ***C01B 21/0602*** (2013.01);  
***C09D 1/00*** (2013.01); ***C09D 5/006*** (2013.01);  
***C03C 2217/732*** (2013.01); ***C03C 2217/78***  
(2013.01); ***H05K 5/0086*** (2013.01)

(21) Appl. No.: 16/457,389

(22) Filed: **Jun. 28, 2019**

### Related U.S. Application Data

(60) Provisional application No. 62/776,982, filed on Dec. 7, 2018.

## Publication Classification

(51) **Int. Cl.**

<i>C03C 17/22</i>	(2006.01)
<i>H05K 5/00</i>	(2006.01)
<i>H05K 5/03</i>	(2006.01)
<i>G02B 1/113</i>	(2006.01)
<i>G02B 1/14</i>	(2006.01)
<i>C01B 21/06</i>	(2006.01)

(57) **ABSTRACT**

An electronic device may include electrical components mounted within a housing. The device may have a display on a front face of the device that is covered with a glass structure and may have a glass structure that forms part of the housing on a rear face of the device. The housing may also have a sidewall formed from glass, metal, or other materials. The glass structures of the electronic device may have a surface that is covered with an antiscratch layer, an antireflection layer, or other coating. A spiral grain polycrystalline material may form a coating on the surface of the glass structures to help avoid fracturing of the glass structures when the electronic device is dropped or otherwise subjected to stress.

